Unitil
Unitil Service Corp.

May 12, 2005

VIA OVERNIGHT MAIL

Ms. Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd floor
Boston, MA 02110

Re: Investigation by the Department Regarding Service Quality Guidelines Established in Service Quality Standards for Electric Distribution Companies and Local Gas Distribution Companies, D.T.E. 04-116

Dear Secretary Cottrell:

Enclosed for filing on behalf of Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"), please find an original and one (1) copy of Unitil's responses to the Department's first set of information requests to all Gas Local Distribution Companies in the above-referenced docket. As requested, copies of Unitil's responses are being sent by e-mail to the parties.

Thank you for your attention to this matter.

Sincerely,

Gary Epler

Enclosure

cc: Jody M. Stiefel, Hearing Officer

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Commonwealth of Massachusetts
Department of Telecommunications and Energy
Investigation Into Service Quality Guidelines
Docket No: D.T.E. 04-116
Department Staff's First Set of Information Requests to
All Gas Local Distribution Companies

Request No. DTE-GAS 1-1

Please explain how your company calculates and measures each of the following service quality performance measures with regard to

(i) variable definition and measurement; (ii) data-collection methods; (iii) data quality issues; and (iv) data analysis and interpretation. Illustrate where possible.

a) Non Emergency Telephone Answering Factor
b) Emergency Telephone Answering Factor
c) Service Appointments kept
d) Meter Reads
e) Lost Time Accident Rate
f) Response to Odor Calls
g) Staffing Levels
h) Consumer Division Cases
i) Restricted Work Day Rate
j) Unaccounted for Gas

Response:

a) Non Emergency Telephone Answering Factor: The Telephone Answering Factor for "Non-Emergency Calls" is defined as the percentage of telephone calls that are handled within a 20 second time interval. Calls included in this measurement are all telephone calls other than those defined as emergency calls. The data collected for this service quality measure originates from the current Avaya Automatic Call Distributor ("ACD") management software and is reported on the Split/Skill Call Profile Monthly Report. The response time is measured from the point where a customer opts out of the Company's Interactive Voice Response ("IVR") system to speak to a customer service representative. Once the customer chooses any of the options to speak to a representative, the system begins tracking the wait time in seconds until a representative answers the call. Since the Company's customer service center staffs a 24 x 7 operation handling calls for both Unitil companies (Unitil Energy Systems and Fitchburg Gas and Electric Light Company), exclusive non-emergency telephone answering factor data for Fitchburg Gas and Electric Light Company is not available. In addition, calls are not separated by Gas and Electric divisions; therefore, both Gas and Electric non-emergency calls are included. All data is captured and tracked in the Avaya Definity PBX and each report provides the pertinent data for all of Unitil's inbound calls so that the Telephone Answering Factor may be calculated. The percentage is calculated by combining the number of ACD Calls answered within each of the threshold categories (0 – 5 seconds; 5 – 10 seconds; 10 – 20 seconds) and then dividing that number by the total number of ACD Calls. There

have not been data quality issues for this measure because the PBX system was designed specifically to measure and report this service quality measure.

b) Emergency Telephone Answering Factor: The Telephone Answering Factor for "Emergency Calls" is defined as the percentage of emergency telephone calls handled within a 20 second time interval. Calls included in this measurement are those where the caller believes he or she is confronting special circumstances that might lead to bodily and/or system-related damage if the circumstances remain unaddressed. Emergency Calls are tracked using slightly different methods and systems. Customers calling our Call Center are given an option, through the IVR system, to report a Gas related emergency such as a gas odor or gas leak call. Upon the customer's selection for a Gas related emergency, the Avaya system first determines if a customer service representative is available to answer their call. If a representative is available in the Call Center, the call is immediately answered by a representative. This data is measured through the Avaya ACD management software and reported from the Fitchburg Gas and Electric Light Company d/b/a Unitil Gas emergency Vector Directory Number ("VDN") Call Profile Monthly Report. The response time is measured from the point where a customer chooses the emergency option until a representative answers their call. The percentage is calculated by combining the number of ACD + Connect Calls answered within each of the threshold categories (0 – 5 seconds; 5 – 20 seconds) and then dividing that number by the total number of ACD + Connect Calls. If a representative is not readily available in the Call Center, the customer is routed to the Unitil dispatch office. The weekly Basic Call Management System ("BCMS") report provided from the Unitil Avaya PBX tracks the number of calls for each day and the percentage answered within 20 seconds. Both reports for Gas emergencies are used to track the percentage of Gas emergency calls answered within 20 seconds. There have not been data quality issues for this service quality measure because the telephone systems are specifically designed to measure and report this service quality measure; however, reporting is difficult due to the complexities involved in using two separate call termination points – the Call Center and the Unitil dispatch center.

c) Service Appointments Kept: Service Appointments kept is defined as the percentage of service appointments scheduled with customers that are met on the same day scheduled. The criteria Unitil uses for defining a service appointment is as follows: (1) the customer is a person who pays Unitil for metered service; (2) the customer is required to be present; (3) the appointment is mutually agreed upon between the customer and Unitil; and (4) the type of service provided is restricted to the following services: meter-on, meter-off, read-in, re-light, scheduled meter exchange, meter test, meter set, new service installation, connect/reconnect service. The data is provided from a report from the Customer Information System ("CIS"), and the specific source of the data within the system is in the automated work order system. Once an appointment is

mutually agreed upon, a work order with the service appointment date and time is scheduled with a customer. Once the work is completed, the date and time the work was completed is entered in the system. Statistical data is extracted from the work order system and a report is generated that cumulates the total number of service appointments scheduled, the total number of service appointments met as scheduled and the calculation that determines the percentage of service appointments met as scheduled. The report provides specific details of each month, service type and work order type. Service Appointments scheduled for customers with a meter located outside the building are excluded from the query to represent those appointments that did not require the customer's presence. The report tracks the number of mutually agreed upon service appointments, the number met on the same day and then calculates the percentage of those met on the same day as scheduled. Unitil extracts the data from the report and puts it into an Excel spreadsheet. There have not been data quality issues for this service quality measure because the report was customized to accurately report service appointments entered into Unitil's CIS work order system.

d) Meter Reads: On-Cycle Meter Readings is defined as the percentage of actual meter readings obtained to the total of meter readings scheduled to be obtained for all customer specific usage levels of energy. Unitil's CIS provides the data to measure on-cycle meter readings. Specifically, the number of estimated reads, actual reads and total scheduled reads, by route, is obtained from the CIS. The total number of billings issued to customers based upon actual meter readings divided by the total number of billings issued to customers determines the percentage of actual meter readings. Unitil extracts this data from the monthly Read vs. Processed Report and downloads it into an Excel spreadsheet. There have not been any data quality issues because the CIS system is specifically designed to track the number of estimated meter reads, actual meter reads and total scheduled meter reads, by route each month. In addition, the report used to obtain this information was customized specifically for this purpose.

e) Lost Time Accident Rate: The Lost Time Accident Rate measurement is based upon the definition of a Lost Time Accident under Occupational Safety and Health Administration ("OSHA") regulations. Unitil records the number of lost work time accidents and illnesses on the OSHA 300 LOG. This log is a record and categorization of recordable incidents per OSHA regulation. All recordable incidents, of which lost work time accidents are a subset, are required to be recorded on the OSHA 300 LOG, within 7 days of occurrence. The OSHA 300 LOG is kept and maintained on an annual basis.

Unitil's Lost Work Time Accident Rate is calculated based on the following formula:

Incident Rate = (N/EH) x 200,000 where,

N	= number of lost work time injuries and illnesses, including cases involving days away from work, days of restricted work activity, or both,
EH	= total hours worked by all Unitil employees during the calendar year,
200,000	= base for 100 equivalent full time employees (FTEs) (working 40 hours per week, 50 weeks per year).

Unitil's data is maintained on a combined basis for its Gas and Electric divisions since many operations employees of Unitil engage in work activities that support both gas operations and electric operations. There have not been any data quality issues for this service quality measure.

f) Response to Odor Calls: The Response to Odor Calls is defined as the response to Class I and Class II odor calls. Odor Calls to the Systems Dispatcher are received from two sources: (1) a Unitil direct line designated for gas emergencies; or, (2) calls may be routed to the dispatch office from Unitil's Customer Service Center. The Systems Dispatcher enters the following data on the Dispatcher Log sheet: date; time the call was received; the caller name; the caller telephone number; the service address; the work order number; the time dispatched; and the arrival time. The Systems Dispatcher enters the following data into an Excel spreadsheet: date and time the customer called; the arrival time and the Unitil vehicle number; the work order number; the street number; the street name; and the city or town. The Response to Odor Calls percentage is calculated by taking the total number of responses to odor calls minus the number of responses to odor calls over 60 minutes and dividing the result by the total number of responses to odor calls. The Team Leader of Dispatchers review and checks the data by comparing the Dispatcher Log Sheet with the Excel spreadsheet to confirm entries made are correct. Multiple calls regarding the same gas odor incident (same date, same time, and same location) are logged as one call and the response time is calculated from the first call received.

g) Staffing Levels: G.L. c. 164 requires present staffing levels of a distribution company to be tied to a company's November 1, 1997 levels only when it operates under a performance-based rate ("PBR") plan. As the Department recognized in D.T.E. 04-21 (Letter Order issued October 22, 2004), Unitil is not yet operating under a PBR plan, and the company files its service quality reports for informational purposes only. Accordingly, no staffing level benchmark for Unitil is required. However, the Department has determined that there is value in distribution companies reporting their staffing levels for informational purposes, as compared to November 1997, on an annual basis. In its annual reporting, Unitil has provided the staffing levels for Fitchburg Gas and Electric Light Company and has not included employees as part of Unitil system subsidiaries.

Unitil believes that since employees can be transferred between the Unitil system subsidiaries (with the work they perform continuing to inure to the benefit of Unitil), it is important to review staffing levels on a total system basis in order for a complete and meaningful analysis of staffing levels to be performed. Accordingly, this interpretation has an impact on data definition, measurement, and analysis.

h) Consumer Division Cases: Consumer Division Cases are defined as written records opened by the Consumer Division of the Department in response to a complaint that meets the appropriate criteria outlined in the Service Quality Guidelines. The case involves an issue or issues over which Unitil has control. A Complaint shall mean a formal complaint to the Consumer Division of the Department wherein the Consumer Division creates a systems record with a customer's name and address. The Department compiles and aggregates the frequency of Consumer Division Cases and sends a report showing the monthly results to Unitil. The Department compiles Unitil's cases on the "Crosstab Report – Consumer Database" report under the Gas division section only. Both Gas and Electric complaints are combined due to the inability to segregate cases between Unitil's two divisions. A data quality issue exists for Unitil for the two divisions, but not for Unitil as a whole.

i) Restricted Work Day Rate: The Restricted Work Day Rate measurement is based upon the definition of a Restricted Work Day under OSHA regulations. Unitil records the number of restricted work days on the OSHA 300 LOG. This log is a record and categorization of recordable incidents per OSHA regulation. All recordable incidents are required to be recorded on the OSHA 300 LOG, within 7 days of occurrence. The OSHA 300 LOG is kept and maintained on an annual basis.

Unitil's Restricted Work Day Rate is calculated based on the following formula:

Incident Rate	= (N/EH) x 200,000 where,
N	= number of lost work time injuries and illnesses, including cases involving days of restricted work activity only,
EH	= total hours worked by all Unitil employees during the calendar year,
200,000	= base for 100 equivalent full time employees (FTEs) (working 40 hours per week, 50 weeks per year).

Unitil's data is maintained on a combined basis for its Gas and Electric divisions since many operations employees of Unitil engage in work activities that support

both gas operations and electric operations. There have not been any data quality issues for this service quality measure.

j) Unaccounted for Gas: The methodology used to calculate unaccounted for gas is consistent with Unitil's Gas Allowance for Local Distribution Companies contained in Unitil's Distribution Service Terms and Conditions, M.D.T.E. 109. As defined in Section 2.0 of M.D.T.E. 109, the Company Gas Allowance is the difference between the sum of all amounts of gas received into the Company's distribution system and the sum of all amounts of gas delivered from the Company's distribution system [for the most recent twelve month period ending July 31].

The amount of gas received each month into Unitil's system is taken from Unitil's gas log. This data is collected from the Tennessee Gas Pipeline ("TGP") 3330 metering located at the TGP gate station, Liquefied Natural Gas ("LNG") and Liquefied Petroleum Gas ("LPG") volumes are determined using BOL delivery records and daily inventory liquid measurement of product in storage. The amount of gas delivered to customers is based on billed amounts and is taken from reports from Unitil's billing system. Amounts of gas received and gas delivered include gas for Unitil's firm sales, firm transport, and interruptible customers.

The Company on an ongoing basis reviews the technology and processes used for gas flow measurement and advances projects to improve quality and efficiency from time to time. For example, within the last 12 months, the LPG liquid measurement system has been upgraded from a mechanical measurement system to an automated electronic system that is integrated to the gas SCADA system.

The difference between the amount of gas received and the amount delivered includes, but is not limited to, gas consumed by Unitil for its own purposes, system losses and gas vented and lost as a result of an event of Force Majeure, excluding all gas metered into the system and gas metered and accounted for through meter readings. The unaccounted for gas calculation divides the difference between the amount of gas received and the amount delivered by the amount of gas received.

Person Responsible: Mark Lambert, George Long, Kevin Sprague & Glenn Appleton

Date: May 12, 2005

Commonwealth of Massachusetts
Department of Telecommunications and Energy
Investigation Into Service Quality Guidelines
Docket No: D.T.E. 04-116
Department Staff's First Set of Information Requests to
All Gas Local Distribution Companies

Request No. DTE-GAS 1-2

Please discuss any problems that your company has had in the calculation and measurement of the service quality performance measures and how the company dealt with them.

Response:

Emergency Telephone Answering Factor: As discussed in response to DTE-GAS 1-1, there have not been data quality issues in the calculation and measurement for this service quality measure because the telephone systems are specifically designed to measure and report this information. However, reporting is difficult due to the complexities involved in using two separate call termination points, one at the Unitil Call Center and the other at the Unitil dispatch center.

Staffing Levels: As discussed in response to DTE-GAS 1-1, Unitil believes that since employees can be transferred between the Unitil system subsidiaries (with the work they perform continuing to inure to the benefit of Unitil), it is important to review staffing levels on a total system basis in order for a complete and meaningful analysis of staffing levels to be performed. Accordingly, this interpretation has an impact on data definition, measurement, and analysis.

Consumer Division Cases: As discussed in response to DTE-GAS 1-1, the Department compiles Unitil's cases under the Gas division section only. Both Gas and Electric complaints are combined due to inability to segregate cases between Unitil's two divisions. A data quality issue exists for Unitil for the two divisions. Accordingly, Unitil has reported the Consumer Division Cases under its Gas division realizing that the figures likely include both Gas and Electric division statistics.

Person Responsible: Mark Lambert and George Long

Date: May 12, 2005

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Request No. DTE-GAS 1-3

Please discuss the advantages and disadvantages of standardizing the calculation and measurement of the service quality performance measures. In addition, discuss any problems that your company specifically would have if the Department were to standardize the calculation and measurement of the service quality measures.

Response:

As previously stated in its response to DTE-A 1-2, Unitil believes standardized benchmarking on a state-wide basis begins with consistent definitions; however, that is not all that is required. The Department has made significant strides in standardizing the definitions so all utilities are reporting on the same basis. However, performance of a utility is based upon factors that are company specific. For instance, on-cycle meter reading is very difficult to measure from one utility to another. Factors such as number of meters, customer density, size of labor force, and overall size of franchise area are the physical constraints. A company which may have installed an automated meter reading system would tend to perform at a higher level than a company which continues to manually read individual meters, though the latter company may be conducting its meter reading in an exemplary manner.

Technology can have a major impact on many of the service quality standards (telephone service factor, on-cycle meter reading, billing adjustments, etc.). Comparing a utility that has implemented certain technology to a company that has not will not necessarily yield an accurate performance appraisal. Technology is only one of the many factors that differ amongst the utilities.

Unitil provides the following specific comments regarding Staffing Levels and Unaccounted for Gas:

Staffing Levels: It would be difficult to establish a uniform total system basis for measuring staffing levels that could apply to all Massachusetts LDCs. The difficulty occurs in defining the number of shared employees that are allocated by each system company to the LDC functions.

Unaccounted for Gas: A disadvantage to standardizing the gas loss measurement is that Unaccounted for Gas is affected by the age, design, type of equipment, size of labor force, meter calibration, and operating pressure of each system. In addition, the amount and severity of third party incidents can have a major impact on Unaccounted for Gas. The standardization of the Unaccounted for Gas calculation is further complicated because gas meters measure volume. However, the amount of energy consumed is measured in therms and is calculated with a system calorific factor. This calorific factor is averaged over the billing cycle. In addition, Unitil is billed from Tennessee based upon their measured calorific factor. Unitil bills its customers based upon our calorific

factor. If these two measurements are not totally calibrated, there will be Unaccounted for Gas as a result. Furthermore, the meters Unitil uses are calibrated to 7" wc. On the high pressure system, each customer receives 7" wc after the gas goes through a regulator. On the low pressure system, the pressure can fluctuate from as high as 12-14" wc to as low as 5-6" wc. This will also cause Unaccounted for Gas. Despite these issues, Unitil believes its approach is reasonable.

Unitil maintains that there are significant limitations, in terms of validity and applicability, of using national, regional and statewide data to establish uniform or comparative performance benchmarks. There are inherent differences among utilities in terms of data-collection methods, data quality, geography, distribution system design and configuration and weather impacts that make it extremely difficult to establish standardized performance benchmarks that would have validity in terms of measuring (and penalizing) the performance of a specific Massachusetts-based utility.

These differences are significant because it is not possible to make comparisons among utilities if, for example, they are not computing the performance statistics in the same way, or are not operating under the same economic, business and natural environments. It would be cost prohibitive for all utilities to establish uniform benchmarks due to the differing operational, demographic and geographic challenges that each utility faces. None of these considerations have changed in the three years since the Department's ruling in D.T.E. 99-84. Although the Department and various industry groups have made progress in terms of the standardization of performance measures through the adoption of common definitions and data-collection practices, nothing has occurred since the filing of the Benchmarking Report to change the fact that the only feasible and analytically sound approach to evaluating a utility's performance is to compare its current performance to its past performance.

Person Responsible: Mark Lambert, George Long, Kevin Sprague & Glenn Appleton

Date: May 12, 2005

Commonwealth of Massachusetts
Department of Telecommunications and Energy
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Docket No: D.T.E. 04-116
Department Staff's First Set of Information Requests to
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Request No. DTE-GAS 1-4

Please propose a method for standardizing the calculation and measurement of each performance measure listed in DTE-GAS 1-1 with regard to (i) variable definition and measurement; (ii) data-collection methods; (iii) data quality issues; and (iv) data analysis and interpretation.

Response:

Unitil maintains that many of the service quality performance measures cannot be standardized. Accordingly, Unitil proposes no change to the calculation and measurement of items a) through j). Please see response DTE-GAS 1-3.

Person Responsible: Mark Lambert, George Long, Kevin Sprague & Glenn Appleton

Date: May 12, 2005